| | Application No. | Applicant(s) |
|---|---|---|
| **Notice of Allowability** | 10/729,515 | ANANTHA ET AL. |
| | Examiner | Art Unit | |
| | FATOUMATA TRAORE | 2436 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *amendments filed 11/26/2010 and phone interview on 12/10/2010*.

2. ☒ The allowed claim(s) is/are *1-16,18,19 and 21-30*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*  c) ☐ None  of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    **Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☒ Other *edan_A.NE_11_26_2010_GGZGQXIAPPOPPY2.pdf*.

/Fatoumata Traore/
Examiner, Art Unit 2436

## DETAILED ACTION

1.      This is in response to the communication filed 11/26/2010 and phone interview on

December, 10, 2010.  Claims 1-16 and 18-32 are pending and have been considered.


## EXAMINER'S AMENDMENT

2.      An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

        Authorization for this examiner's amendment was given in a telephone interview with

Aaron S. Reed (Reg. No. 56,116) on December 10, 20101

        The application has been amended as follows:


                1.      (Currently Amended) One   or   more   <u>non-transitory</u>   computer-

        readable media having computer-executable instructions embodied thereon that, when

        executed, provide a system that facilitates access to a plurality of shared software objects

        by disparate entities, the system comprising:

                        a platform component executed by a computing device having a

                processor and a memory, that receives a request from a first entity to

                access one of the plurality of shared software objects, wherein the first

                entity is attempting to convert a subscription from a second type of a

                second entity to a first type of the first entity;

a data store that stores security information on one or more classes of the plurality of shared software objects, wherein the security information on each of the one or more classes is inherited by one or more shared software objects in each class, and wherein the security information includes a security parameter that indicates whether the first entity is permitted to convert the subscription from the second type to the first type; and

a verification component that employs the security information to verify that the first entity has permission to call an Application Programming Interface (API) for the one of the plurality of shared software objects to convert the subscription from the second type to the first type, wherein the verification component prevents the first entity from calling the API when the security parameter indicates that the first entity is not permitted to convert the subscription from the second type to the first type and the verification allows the first entity to call the API when the security parameter indicates that the first entity is permitted to convert the subscription from the second type to the first type.

3.      (Currently Amended) The media of claim 1, wherein the verification component masks the ~~object~~ one of the plurality of shared software objects from the entity if permission does not exist.

18.     (Currently Amended) A     method     to     facilitate     security     for subscription objects, comprising:

storing one or more security options in a database, at least a portion of the one or more security options being related to an automated billing and provisioning system, wherein at least a portion of the one or more security options includes at least conversion of a subscription from a first type associated with a first tenant to a second type associated with a second tenant, and wherein one or more of the security options indicate allowability of the second tenant to convert the subscription type from the first type to the second type;

assigning one or more of the security options to a class; [[and]]

inheriting the one or more security options assigned to the class by object members of the class;

verifying that the second tenant has permission to call an Application Program Interface (API) for one or more of the object members of the class to convert the subscription type from the first type to the second type; and

preventing the second tenant from calling the API when the security options indicate that the second entity is not permitted to convert the subscription type from the first type to the second type; or

allowing the second tenant to call the API when the security
options indicate that the second tenant is permitted to convert the
subscription type from the first type to the second type.

20.      (Cancelled)

21.      (Currently Amended) The method of ~~claim 20,~~ claim 18, further
comprising automatically authorizing the API.

30.      (Currently Amended) One or more non-transitory computer-
readable media having computer-executable instructions embodied thereon that, when
executed, provide a system to facilitate business object security, comprising:

an authentication component executing on a computing device
having a memory and a processor that authenticates a first entity
attempting to access an online billing and service system, wherein the first
entity is attempting to convert a subscription from a second type of a
second entity to a first type of the first entity;

an authorization component that authorizes the first entity to
convert the subscription from the second type of the second entity to the
first type of the first entity upon verifying at least one security parameter,
wherein the at least one security parameter is assigned to a class of objects
and is inherited by objects of the class by one or more of explicitly and
implicitly assigning the security parameter to the objects of the class,
wherein the at least one security parameter is stored in a database and is

accessible via an application program interface that is automatically authorized by analyzing one or more security credentials, and wherein the at least one security parameter indicates allowability of the first entity to convert the subscription from the second type to the first type.

31.     (Cancelled)

32.     (Cancelled)

## Allowance

3.      Claims 17, 20, 31 and 32  have been cancelled.

4.      Claims 1, 3, 18, 21 and 30 have been amended.

5.      Claims  1-16, 18-19 and 21-30 are allowed.

### *Examiner's Statement of Reasons for Allowance*

The following is an examiner's statement of reasons for allowance

6.      Zothner (US 6,751,657) is drawn toward a system and/or methodology that provide an automated and dynamically responsive infrastructure to support online subscription services. The system coordinates and manages services offered by service providers. This can include automatically creating and managing billing accounts for customers. At least one engine is provided to process multiple rules in response to subscription events that occur in connection with the services to facilitate service delivery. At least one rating processor is provided to process multiple rating rules in response to subscription events

7.      Reunert eta al (US 7,418,426) is drawn toward An approach for providing notification

services using rules-based technology is disclosed. A Business Rules Manager module maps the

business rules to business triggers, in which any pre-defined action can be performed based on

the rule execution. Business rule triggers map a set of object life cycle states or business

processes to set(s) of business rules; these business rules are mapped to trigger conditions.

Notifications are then mapped to the business triggers (i.e., notification trigger points) such that

the appropriate information can be sent to the recipients according to the business conditions or

business rule actions. The users subscribe to the notification trigger points based upon the users'

role, as specified in the user profiles. A user supplied subscription filter criteria permits filtering

of the notifications. However, a global user override attribute associated with a notification

trigger point can bypass the subscription filter criteria.

8.      The above prior art reference of record do not teach or render obvious the limitations as

recited in independent claims 1, 18 and 30 amended. The combined references fail to teach

a data store that stores security information on one or more

classes of the plurality of shared software objects, wherein the security

information on each of the one or more classes is inherited by one or more

shared software objects in each class, and wherein the security

information includes a security parameter that indicates whether the first

entity is permitted to convert the subscription from the second type to the

first type; and

a verification component that employs the security information to verify that the first entity has permission to call an Application Programming Interface (API) for the one of the plurality of shared software objects to convert the subscription from the second type to the first type, wherein the verification component prevents the first entity from calling the API when the security parameter indicates that the first entity is not permitted to convert the subscription from the second type to the first type and the verification allows the first entity to call the API when the security parameter indicates that the first entity is permitted to convert the subscription from the second type to the first type.

The combination of Zothner and Reunert et al does not render Applicants' claims obvious because the combination does not teach or suggest these features.

9.      Dependent claims are allowed as they depend from an allowable independent claim.


**Conclusion**

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.  Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FATOUMATA TRAORE whose telephone number is (571)270-1685.  The examiner can normally be reached on Monday- Friday (every other Friday off) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nasser Moazzami can be reached on 571 272 4195. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Monday, December 13, 2010

/Fatoumata Traore/

Examiner, Art Unit 2436



/Nasser Moazzami/

Supervisory Patent Examiner, Art Unit 2436